

Sbjkt --64. The method of claim 27, wherein the control information received at the device controller is in a first protocol, further comprising the step of:

B3 the device controller translating the control information from the first protocol to a second protocol prior to transmitting the control information.--

--65. The system of claim 40, wherein the control information received at the device controller is in a first format, and wherein the device controller is further capable of translating the control information from the first protocol to a second protocol prior to transmitting the control information.--

--66. The system of claim 52, wherein the device controller further includes:
means for translating the control information from a first protocol to a second protocol prior to transmitting the control information.--

REMARKS

In the Office Action, the Examiner (1) rejected claims 1-4, 6-10, 18-22, 23-28, 30-33, 36-41, 43-45, 48-53, 55-57, and 60-63 under 35 U.S.C. §102(e) as being anticipated by Gillio (U.S. Patent No. 5,882,206); and (3) rejected claims 5, 11, 17, 29, 34-35, 42, 46-47, 54, and 58-59 under 35 U.S.C. §103(a) as being unpatentable over Gillio.

Applicants have canceled claims 1-26 without prejudice or disclaimer of the subject matter thereof to expedite prosecution of this application, amended claims 40 and 52 to more appropriately claim the invention, and added new claims 64-66. Claims 27-66 are pending in the application.

Applicants respectfully traverse the rejection of claims 27-63 for the following reasons.

Gillio is directed to a virtual surgery system or virtual testing system that provides a simulator or test based on image data. In rejecting the claims, the Examiner relied on a portion of Gillio that discloses a kiosk that a user may use to perform virtual reality surgical simulation. Gillio describes this kiosk as including a display, a computer, virtual orifices, and a virtual mouse and hose. The virtual mouse and hose may be inserted into one of the virtual orifices. A user may then use the virtual mouse to perform virtual surgery by physically operating the virtual mouse, while viewing the display screen which displays image data corresponding to the user's movements of the virtual mouse in the virtual orifice in order to give the appearance that the user is performing real surgery. Gillio further discloses that a communication link to the simulator may be used in combination with a virtual scope in a remote location so that a demonstration or simulation may be performed on the display of the kiosk from a remote location. Further, a user may use a virtual scope or joystick with remote home computer to use the processing power of a powerful computer such as an IBM mainframe computer.

(col. 7 line 63 - col. 8 line 56).

The Examiner further cited a section of Gillio that discloses performing telesurgery using a simulator in which a surgeon performs surgery using a virtual mock-up of surgical equipment while a robot in a remote location performs the actual surgery based on the surgeon's movements relating to the virtual surgery devices. (col. 3 lines 15-25 and col. 17 lines 7-18).

In contrast, independent claim 27 recites, in part,

receiving control information at the device controller reflecting at least one instruction from the client computer regarding at least one task to be performed as part of the training exercise; and

transmitting the control information from the device controller to at least one of the devices in the set of one or more devices so that the user can exercise control over the set of one or more devices for the purposes of training the user in the operation of the set of one or more devices.

As discussed above, Gillio discloses that a user may remotely perform surgery at one location while a robot simulates the hand movements of the user. Gillio, however, does not teach or suggest a device controller that receives control information and then transmits this information to the device. Rather, in Gillio the information remotely transmitted to the robot is terminated at the robot, and the robot exercises physical control over an endoscope or other surgical device. As such, the robot does not transmit the control information to the device, but rather merely exercises physical control over the device.

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As such, Applicant respectfully submits that Gillio does not teach or suggest a device controller that receives control information and then transmits the control information to a device. Accordingly, Applicants respectfully submit that Gillio does not teach or suggest the invention of claim 27.

Applicants further respectfully submit that for these same reasons, Gillio does not teach or suggest the inventions as recited in independent claims 40 and 52.

Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of claims 27, 40, and 52 under 35 U.S.C. 102(e). Applicants further submit that claims 28-39, 41-51, 53-63, and new claims 64-44 that depend directly on independent claims 27, 40, and 52 are likewise allowable, at least due to their dependence on independent claims 27, 40, and 52.

Additionally, with regard to dependent claim 28, the Examiner rejected this claim under the same grounds that the Examiner applied in rejecting claim 27. Dependent claim 28 recites in part,

determining initialization information based on the exercise start information received at the system controller;
transmitting the initialization information from the system controller to the device controller; and
initializing the set of one or more devices in accordance with the initialization information.

In rejecting this claim, the Examiner provided no additional reasons other than the reasons the Examiner applied in rejecting claim 27. As such, the Examiner did not

point to any particular section of Gillio that discloses at least determining initialization information at a system controller and transmitting the initialization information to the device controller. Applicants respectfully submit that Gillio does not teach or suggest at least determining initialization information at a system controller and transmitting the initialization information to the device controller and initializing the set of one or more devices in accordance with the initialization information.

Accordingly Applicants respectfully submit that dependent claim 28 is allowable also for at least the above-stated additional reasons. Likewise, Applicant respectfully submits that claims 41 and 53 are also allowable for at least these additional reasons.

With regard to dependent claims 33-37, Applicants further respectfully disagree with the Examiner for at least the following additional reasons.

With regard to dependent claim 33, the Examiner rejected this claim under 35 U.S.C. 102(e) as being anticipated by Gillio. In rejecting the claim, the Examiner applied no additional grounds other than those the Examiner applied in rejecting independent claim 27. Nowhere, however, does Gillio discuss remotely exercising control over network devices.

Although in a section the Examiner pointed to in a separate rejection, Gillio states that the invention of Gillio can also be used in a tele-robotics applications or other implementations other than virtual surgery, this section does not teach or suggest network devices.

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As discussed above, in the disclosed tele-robotic system of Gillio, the robot does not transmit control information to the device, but rather physically controls the endoscope or other surgical device. As such, Gillio does not teach or suggest a device controller receiving control information and transmitting the control information to a network device.

Although not relied on by the Examiner, a separate section of Gillio states that the virtual system of Gillio may be used for applications in which a particular tool is attached to a hose to simulate a particular procedure in which an instrument is attached to a tube-like hose that is inserted into some other structure to perform a particular procedure. Gillio further states that the invention of Gillio may be used in an industrial tool environment such as using a drill press, or in landscape architecture, building architecture, manufacturing, plumbing applications, sewage clearing, disasters in nuclear plants, jet or automobile engines, outer space applications, robotic devices, etc. (col. 6 lines 49-60).

Thus, the system of Gillio is directed to applications where a hose attached to a particular tool is inserted into some structure such as an orifice. Nowhere, however, does Gillio teach or suggest network devices. As such, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of dependent claim 33 under 35 U.S.C 102(e). Likewise, Applicants respectfully submit that dependent claims 45 and 57 are also allowable for at least this additional reason.

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With regard to dependent claims 36-37, the Examiner also rejected these claims under the same grounds the Examiner applied in rejecting independent claim 27. Gillio, however, does not teach or suggest remotely controlling a computer, let alone a programmable logic controller. Applicants therefore, respectfully request that the Examiner reconsider and withdraw the rejection of claims 36-37 under 35 U.S.C. 102(e). Likewise, Applicants respectfully request that the Examiner also reconsider and withdraw the rejection of claims 48-49 and 60-61 under 35 U.S.C. 102(e).

With regard to dependent claims 34-35, the Examiner rejected these claims under 35 U.S.C. 103(a) as being unpatentable over Gillio. Applicants respectfully disagree with the Examiner.

In rejecting claims 34-35, the Examiner relied on the above-discussed section of Gillio that states the invention of Gillio may be used in tele-robotic applications.

To establish a *prima facie* case of obviousness, the Examiner must first identify some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be some reasonable expectation of success. See MPEP §2143.

In the Office Action the Examiner merely stated "these network devices would have been obvious to one of skill in the art at the time of the invention to incorporate into Gillio's invention for teaching in the field of operating network devices as Gillio lends

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itself to other applications." The Examiner then cited the section of Gillio that says that the invention of Gillio may also be used in tele-robotics applications.

As such, Gillio merely discloses that the invention of Gillio may be used in other applications where a robot is remotely controlled. Thus, Gillio does not teach or suggest remotely exercising control over network device. In fact, nowhere does Gillio even mention remotely controlling network devices, let alone routers or switches. Further, the Examiner does not explain why it would have been obvious to one of ordinary skill in the art to combine a network device with the invention of Gillio. Applicants, therefore, respectfully submit that the Examiner has not cited a sufficient motivation for combination. Further, the Examiner has not even addressed whether there is a reasonable expectation of success. Without appropriately establishing these elements, the Examiner has not provided a *prima facie* case of obviousness.

Applicants, therefore, respectfully request that the Examiner reconsider and withdraw the rejection of claims 34-35 under 35 U.S.C. 103(a). Likewise, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of claims 46-47 and 58-59 under 35 U.S.C. 103(a).

As such Applicants respectfully request that the Examiner reconsider and withdraw the rejections of claims 27-64, and the timely allowance of the pending claims.

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Please grant any extensions of time required to enter this response and charge
any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Appendix to Amendment of July 3, 2001

40. (Amended) A system for training users to operate a set of one or more devices, comprising:

a device controller connected to a client computer via a network, wherein the device controller is capable of receiving control information from the client computer reflecting at least one instruction regarding at least one task to be performed as part of a training exercise and [transferring] transmitting the control information to any device in the set of one or more devices as part of the training exercise.

52. (Amended) A system for training users to operate a set of one or more devices, wherein a client computer is connected to the system via a network and wherein a particular user uses the client computer to communicate with the system via the network to perform a training exercise using the set of one or more devices, comprising:

a device controller including:

means for receiving control information reflecting at least one instruction from the client computer regarding at least one task to be performed as part of the training exercise; and

means for [performing an operation associated with at least one of the devices in

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the set of one or more devices] transmitting the control information to at least one of the
devices in the set of one or more devices so that the user can exercise control over the
set of one or more devices for the purposes of training the user in the operation of the
set of one or more devices.

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